



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,683	07/31/2001	Craig H. Barratt	15685P042	6227
8791	7590	07/12/2005	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	09/919,683	BARRATT ET AL.	
	Examiner	Art Unit	
	Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 April 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6,8-33,35-46 and 48-58 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,8-33,35-46 and 48-58 is/are rejected.
 7) Claim(s) 1,3,4,24 and 33 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 July 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections.

1. Claims 1, 3, 4, 24, and 33 are objected to because of the following informalities:

Claim 1, line 8-9, and 10; claim 3, line 1; and claim 4, line 1 state, "the resources". Each instance of "the resources" in the above mention lines should be changed to --the one or multiples resources-- to avoid confusion with other disclosed resources.

Claim 24, line 2 and claim 33, line 2 states, "resources that follow a hopping sequence". This should be changed to --resources that do not follow a same hopping sequence-- so that the sentence makes sense.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 8-13, 16-33, 35-37, 40-46, 48, 49, and 52-58 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,359,924 B1, Kuhn et al. (Kuhn).

Regarding claims 1, 18, 27, 40, and 44, Kuhn discloses a machine accessible medium embodying instructions (*figure 3A, col. 4, lines 43-44 where the algorithm is implemented on a machine*) to perform steps associated with “a method for transmitting a data stream between a base station and user terminal comprising: selecting at the base station a first of multiple RF resources to transmit a page; transmitting the page from the base station via the first RF resource; receiving the page at the user terminal via the first RF resource (*col. 4, lines 35-36 whereby sending a page to the terminal the base station is transmitting on a RF resource and there are many different RF resources to choose from in a wireless system*);

selecting at the user terminal one of multiple resources to transmit a page response, including computing a function at the user terminal to determine the resource to select, the one of multiple resources comprising a sequence of radio frequency resources that follow a hopping sequence (*col. 4, lines 40-43 where, again, the terminal transmits a response on a RF resource as did the base station*);

transmitting the page response from the user terminal via the one of multiple resources in response to the page (*col. 4, lines 35-43*); and

transmitting the data stream between the base station and user terminal via a second RF resource (*col. 4, lines 56-58*).”

Regarding claim 16, Kuhn discloses, “transmitting a message from the base station acknowledging the page response (*col. 4, lines 38-40*).”

Regarding claims 17 and 19, Kuhn discloses, "the message identifying a second resource for transmitting a data stream between the base station and the user terminal (*col. 4, lines 38-43*)."

Regarding claims 4, 20, 26, 28, 41, and 45, Kuhn discloses, "wherein the one of multiple resources comprises a sequence of radio frequency resources that follow a hopping sequence among a set of radio frequency channels (*col. 4, lines 40-43*)."

Regarding claims 21 and 29, Kuhn discloses, "transmitting the data stream to the user terminal via the second resource (*col. 4, lines 56-58*)."

Regarding claims 2, 22, 31, 43, and 46, Kuhn discloses, "wherein the first RF resource comprises a first RF resource that is available (*col. 4, lines 35-36 where to transmit on the resource it must be available*)."

Regarding claim 3, Kuhn discloses, "wherein the one of multiple resources comprises a resource that is available (*col. 4, lines 40-43 where to transmit on the resource it must be available*)."

Regarding claim 5, Kuhn discloses, "wherein the resource comprises a sequence of radio frequency resources that follow a hopping sequence among a set of time slots

(col. 5, lines 40-42 where the time slots in figure 3B show that there is hopping among time resources)."

Regarding claims 8-12, 35, 36, 48, and 49, Kuhn discloses, "wherein computing a function at the user terminal for the resource to select includes searching a look up table using information from the page to perform the search *(col. 5, lines 23-28)*."

Regarding claims 13, 25, 37, and 42, Kuhn discloses, "wherein transmitting the page from a base station via the RF resource comprises transmitting the page including page identifier assigned to the user terminal from the base station via the RF resource *(col. 4, lines 35-36 whereby the base station directly transmitting to the terminal (and only the terminal) there must be an identifier present for the signal to be directed to that unique terminal)*."

Regarding claims 23 and 32, Kuhn discloses, "wherein the second resource comprises the same sequence of radio frequency resources that follow a hopping sequence as the first resource *(col. 4, lines 40-46)*."

Regarding claims 24 and 33, Kuhn discloses, "wherein the second resource comprises a different sequence of radio frequency resources that do not follow a same hopping sequence as the first resource *(figures 2 and 3B, where elements 13 and 14 show the border between to different hopping sequences)*."

Regarding claim 52, Kuhn discloses, "a method of communicating with a user terminal, comprising: computing a function at a base station to determine a page listening pattern followed by a user terminal (*col. 4, lines 40-43*); transmitting a page to the user terminal on one of multiple parallel communication resources on the base station, the one parallel communication resource selected based on a result of the function computed (*col. 4, lines 35-36 where the frequencies or time operate as parallel resources as seen in figure 3B*); receiving a page response from the user terminal at the base station, the page response received on one of the multiple parallel communication resources, the communication resource a sequence of radio frequency resource hops (*col. 4, lines 35-43*); and initiating a communication stream on an available communication resource (*col. 4, lines 56-58*)."

Regarding claim 53, Kuhn discloses, "wherein transmitting on one of the multiple parallel communication resources comprises transmitting on one of multiple hardware processing resources (*col. 4, lines 35-43 where transmitting on a given frequency is a transmitting on a particular hardware resource*)."

Regarding claim 54, Kuhn discloses, “wherein each hardware processing resource controls a spatial communication channel (*figure 3B shows that there are spatial relationships between the hardware resources of frequency and time*).”

Regarding claim 55, Kuhn discloses, “wherein initiating the communication stream on the available communication resource comprises the base station initiating the communication stream on one of the hardware processing resources (col., 4, *lines 35-36*).”

Regarding claim 56, Kuhn discloses, “wherein initiating the communication stream on the one hardware processing resource comprises a receiving hardware processing resource initiating the communication stream on a communication resource controlled by the hardware processing resource, independent of the other hardware processing resources (col. 4, *lines 35-46 and figure 3B*).”

Regarding claim 57, Kuhn discloses, “wherein receiving the page response on the communication resource comprises receiving the page response on one of multiple hopping sequences present on the base station (col. 4, *lines 40-46*).”

Regarding claim 58, Kuhn discloses, “wherein receiving the page response on the one hopping sequence comprises receiving the page response on a hopping sequence indicated by the base station to the user terminal (col. 4, *lines 35-46*).”

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhn et al. in view of U.S. Patent 5,291,475, Bruckert.

Regarding claim 6, Kuhn lacks what Bruckert discloses, "wherein the resource comprises a sequence of radio frequency resources that follow a hopping sequence among a set of code division multiple access codes (*col. 1, lines 44-54*)."¹ It would have been obvious to one of ordinary skill in the art at the time of invention to include the allocation of the frequency and time sequences to represent a code in a CDMA system for the purpose of reducing interference among surrounding areas (*Bruckert, col. 2, lines 16-23*). The motivation for this being that the reduced interference allows for less partitioning and thus less complexity.

6. Claims 14, 15, 38, 39, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhn et al. in view of U.S. Patent 5,978,366, Massingill et al. (Massingill).

Regarding claims 14, 38, and 50, Kuhn lacks what Massingill discloses, "wherein receiving the page at the user terminal via the RF resource further comprises examining whether the page identifier in the page matches the page identifier assigned to the user terminal (*col. 15, lines 12-16*).” It would have been obvious to one of ordinary skill in the art at the time of invention to include the matching of the page identifier for the purpose of identifying messages directed at the particular user terminal. The motivation being to not waste resources on processing messages not intended for the user terminal.

Regarding claims 15, 39, and 51, Massingill lacks what Kuhn discloses, "wherein transmitting the page response from the user terminal via the resource in response to the page comprises transmitting the page response from the user terminal via the resource in response to the page if the page identifier in the page matches the page identifier assigned to the user terminal (*col. 4, lines 35-43 where if the identifier indicates a match as in Massingill, then the terminal will perform the registration process in order to further send data*).” It would have been obvious to one of ordinary skill in the art at the time of invention to include the page response if the match valid for the same reasons and motivation as in claims 14, 38, and 50.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4, 13-26, 40-46, and 52-58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

July 7, 2005



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600